

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: HEAD POND	Lake Area (ha):	35.04
Town: BERLIN	Maximum depth (m):	2.4
County: Coos	Mean depth (m):	0.8
River Basin: Connecticut	Volume (m <sup>3</sup> ):	284000
Latitude: 44°31'02" N	Relative depth:	0.4
Longitude: 71°13'38" W	Shore configuration:	1.00
Elevation (ft): 1065	Areal water load (m/yr):	19.36
Shore length (m): 1800	Flushing rate (yr <sup>-1</sup> ):	23.90
Watershed area (ha): 1274.0	P retention coeff.:	0.48
% watershed ponded: 0.0	Lake type:	natural

BIOLOGICAL:

		27 January 2002	22 August 2001
DOM. PHYTOPLANKTON (% TOTAL)	#1	UROGLENOPSIS>99%	DINOBRYON 40%
	#2		CHRYOSOPHAERELLA 35%
	#3		
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			4.55
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 96%	KERATELLA 27%
	#2		POLYARTHRA 21%
	#3		NAUPLIUS LARVA 21%
ROTIFERS/LITER		543	387
MICROCRUSTACEA/LITER		20	236
ZOOPLANKTON ABUNDANCE (#/L)		563	656
VASCULAR PLANT ABUNDANCE			Very abundant
SECCHI DISK TRANSPARENCY (m)			2.1 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		8.5	7.3
BACTERIA (E. coli, #/100 ml)	#1		1
	#2		1
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**

Lake: HEAD POND

Town: BERLIN

	27 January 2002		22 August 2001		
DEPTH (m)	1.5		1.5		
pH (units)	6.4		6.8		
A.N.C. (Alkalinity)	5.6		4.0		
NITRATE NITROGEN	0.08		< 0.05		
TOTAL KJELDAHL NITROGEN	0.30		0.60		
TOTAL PHOSPHORUS	0.010		0.009		
CONDUCTIVITY ( $\mu$ mhos/cm)	73.3		48.8		
APPARENT COLOR (cpu)	23		37		
MAGNESIUM			0.82		
CALCIUM			2.4		
SODIUM			4.7		
POTASSIUM			0.50		
CHLORIDE	8		6		
SULFATE	12		5		
TN : TP	38		67		
CALCITE SATURATION INDEX			3.5		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 2001**

D.O. S.D. PLANT CHL TOTAL CLASS

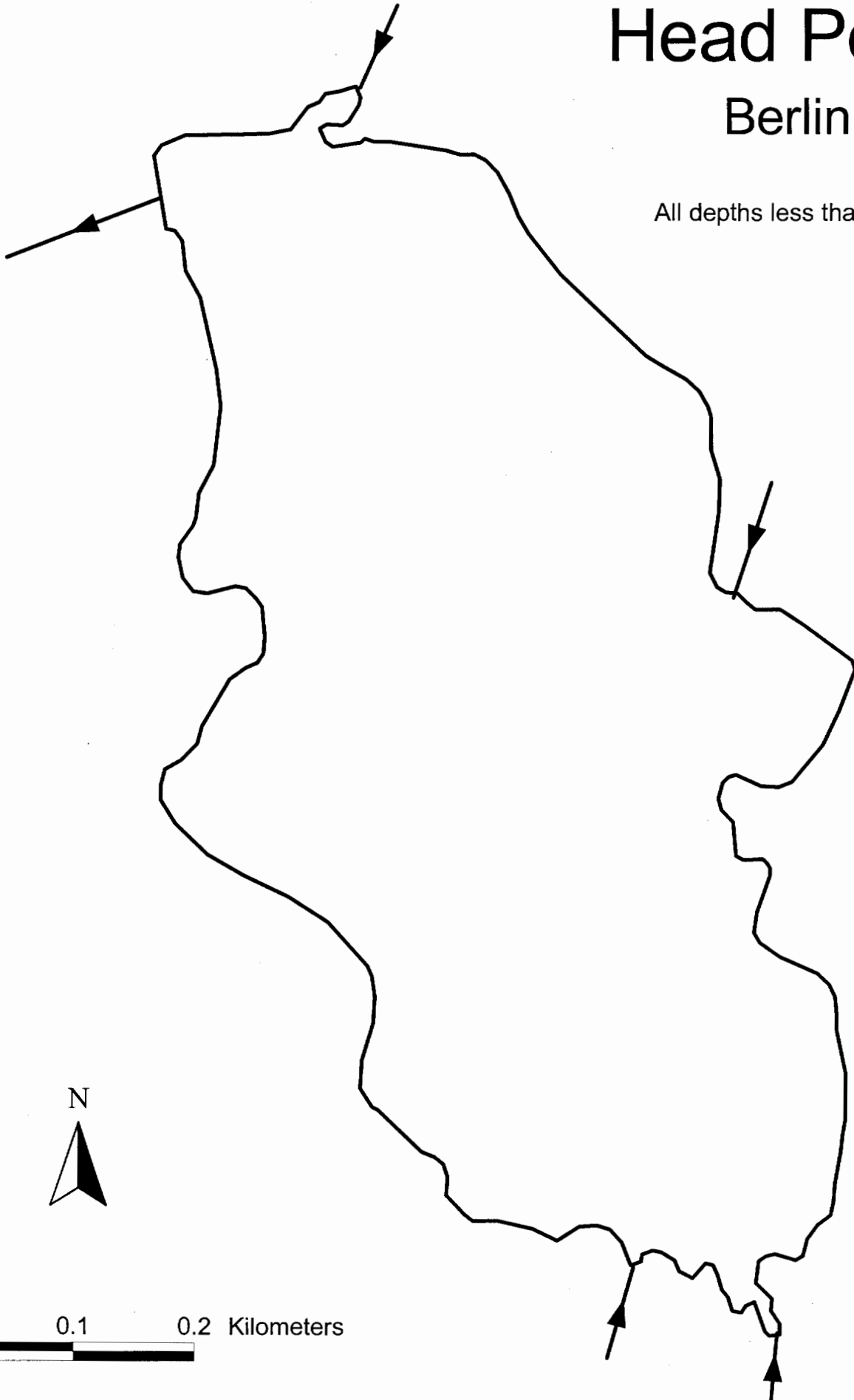
**	2	6	1	9	Meso.
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**COMMENTS:**

1. Previously surveyed in 1987.
2. This is a shallow pond with very abundant plant growth.
3. Summer plankton was varied (14 phytoplankton and 14 zooplankton genera observed) and the zooplankton were numerous.

# Head Pond Berlin

All depths less than 10 feet



0 0.1 0.2 Kilometers



[illegible]

TOWN: BERLIN  
WEATHER: Partly cloudy & cool

[illegible]

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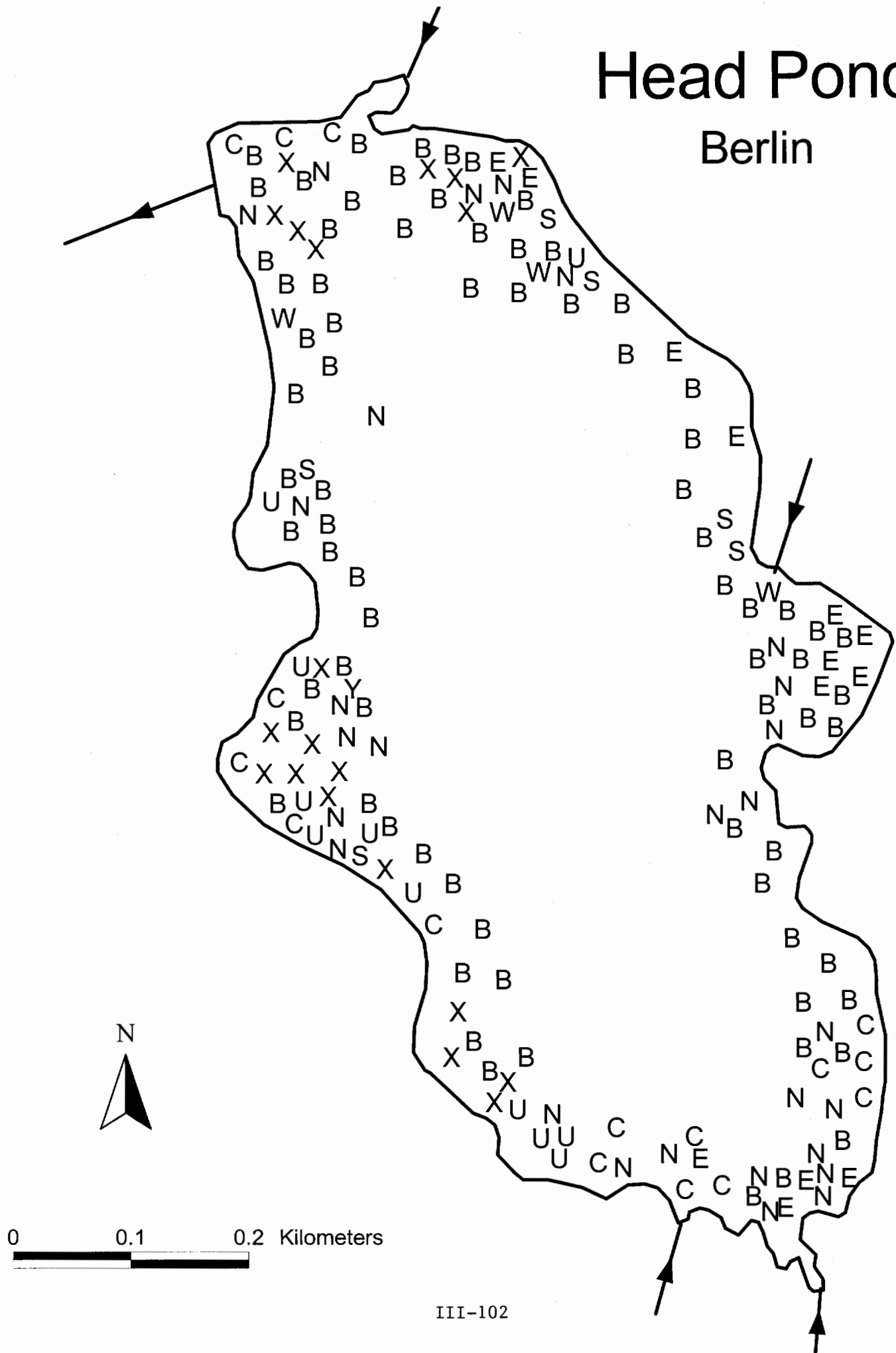
SECCHI DISK (m):    2.1 VOB      COMMENTS:
BOTTOM DEPTH (m):   2.1
TIME: 1145

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\*Dissolved oxygen values are in mg/L

# Head Pond

## Berlin



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